THE STATE WATER BOARD'S ROLE IN SUSTAINABLE GROUNDWATER MANAGEMENT

Erik Ekdahl & Brent Vanderburgh
Groundwater Management Program
Office of Research, Planning and Performance
State Water Resources Control Board

Updates on:

- Sustainable Groundwater Management Act (SGMA) Background
- SWRCB, DWR activities and coordination
- Other Program work

SGMA Background: Legislation Drivers

Natural

- Climate
- Precipitation
- Ecosystems

State

- Population
- Planning
- Infrastructure

Local

- Land use
- Local effects

What is SGMA?

Signed by Governor on September 16, 2014

- AB 1739 (Dickinson)
- SB 1168 (Pavley)
- SB 1319 (Pavley)
- Effective January 1, 2015

"A central feature of these bills is the recognition that groundwater management in California is best accomplished locally."

- Governor Edmund G. Brown Jr., in signing statement accompanying SGMA groundwater legislation.

The Basics

- Requires formation of GW sustainability agencies and development of sustainability plans
  - 127 High and medium basins only
- Authorizes management tools for local agencies
- Creates state “backstop”
- Defines time frame for accomplishing goals

Local Agency Planning

- Groundwater Sustainability Agencies (GSAs) (2017)
  - One or more agencies
  - If more than one agency per basin, GSAs must coordinate
- GSAs Prepare Groundwater Sustainability Plans (GSPs) (2020/2022)
  - Measurable objectives
  - Implementation milestones
  - Annual reports (water use, extraction, change in storage)
- Achieve Sustainability 20 years after plan adoption, prevent “undesirable results”

Sustainable groundwater management means:

Management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.

Undesirable results means:

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed)
- Significant and unreasonable:
  - reductions in groundwater storage
  - seawater intrusion
  - degradation of water quality
  - Significant and unreasonable land subsidence
  - Surface water depletions adversely impacting on beneficial uses

California Water Boards

Nine Regions:

- Region 5 = 3 Offices
- Region 6 = 2 Offices

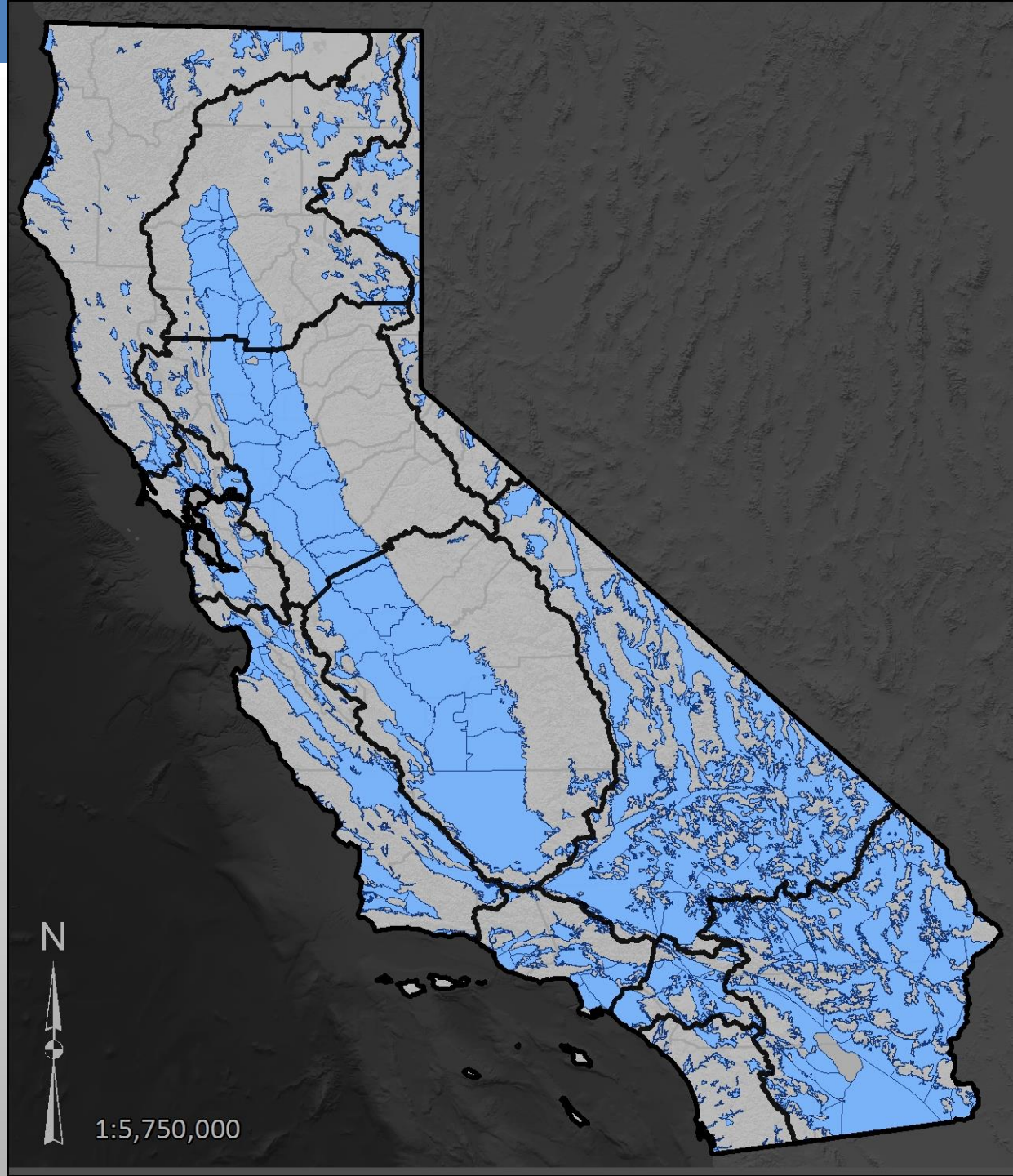
DWR Bulletin 118

Groundwater Basins

515 groundwater basins delineated

Some basins are isolated, some share basin boundaries

Fractured bedrock not included



STATEWIDE

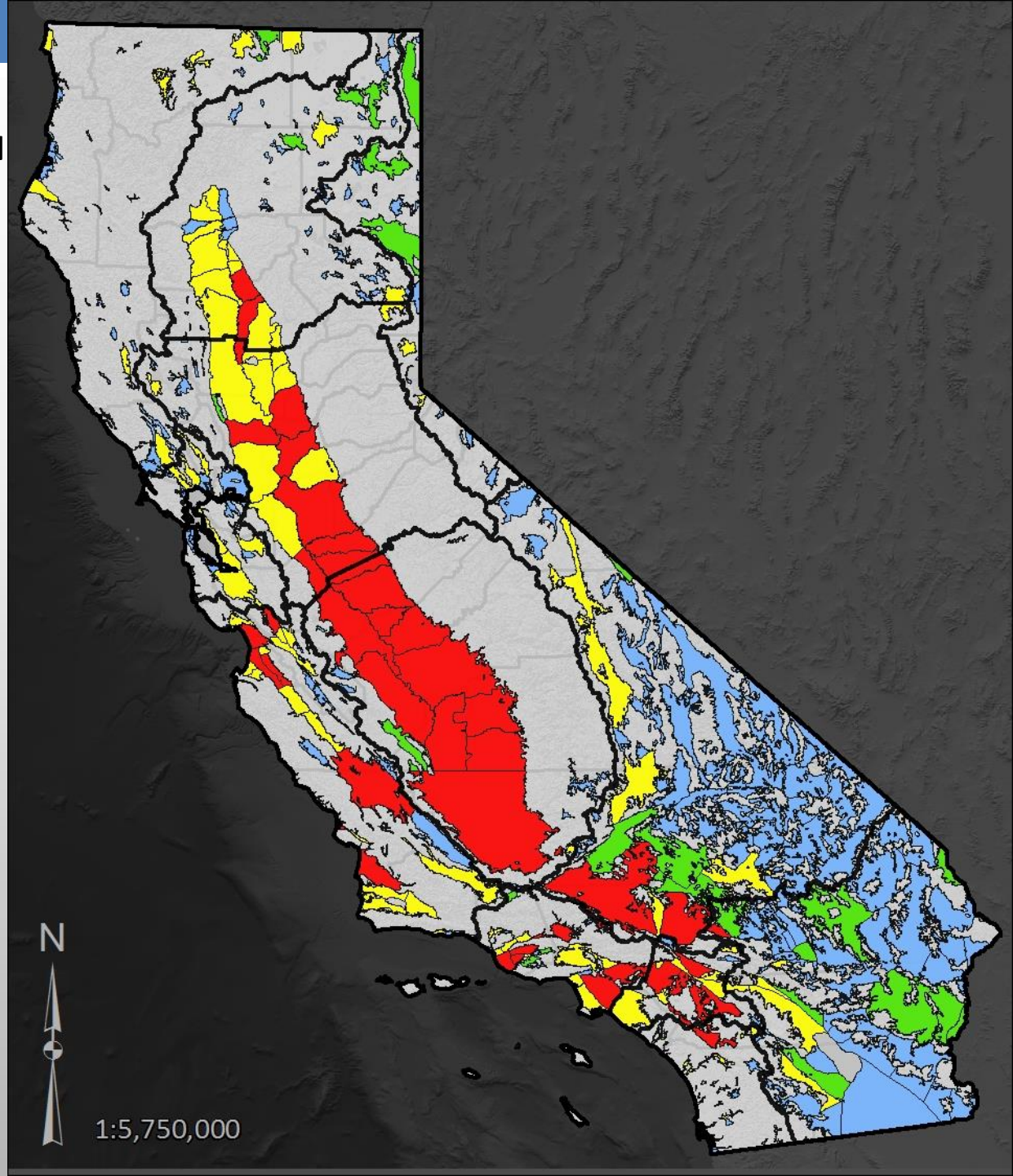
DWR CASGEM PRIORITIZATION

Statewide groundwater basin prioritization

Basins displayed by priority:

43 High Priority Basins (**R**)
84 Medium Priority Basins (**Y**)
27 Low Priority Basins (**G**)
361 Very Low Priority Basins (**B**)

Calculation involves:
Population & Pop. Growth
Irrigated acreage
Public supply well distribution
And other variables



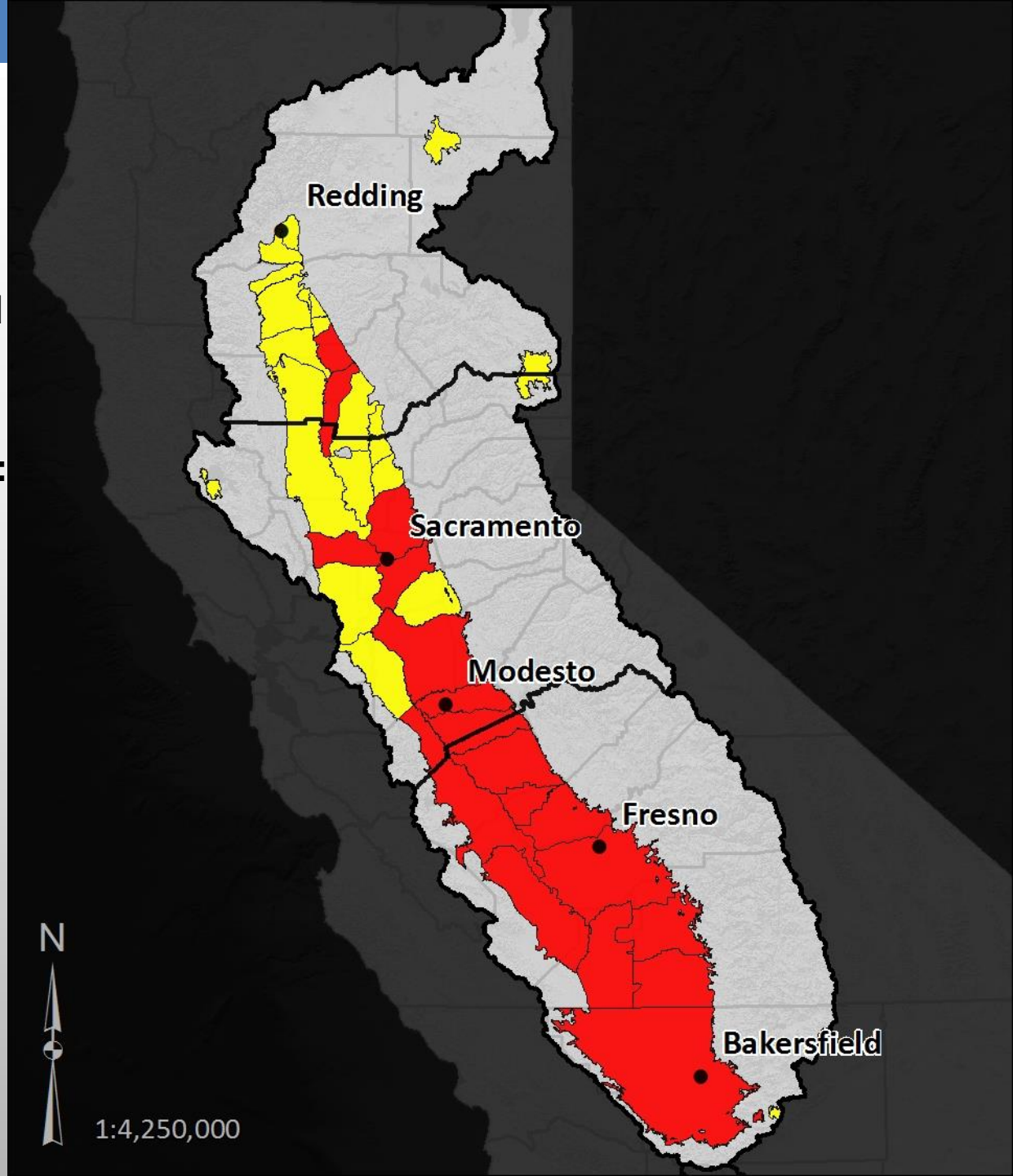
Region 5

High and Medium Priority Basins

SGMA addresses medium and high priority basins

Basins displayed by priority:
Yellow = MEDIUM Priority
Red = HIGH Priority

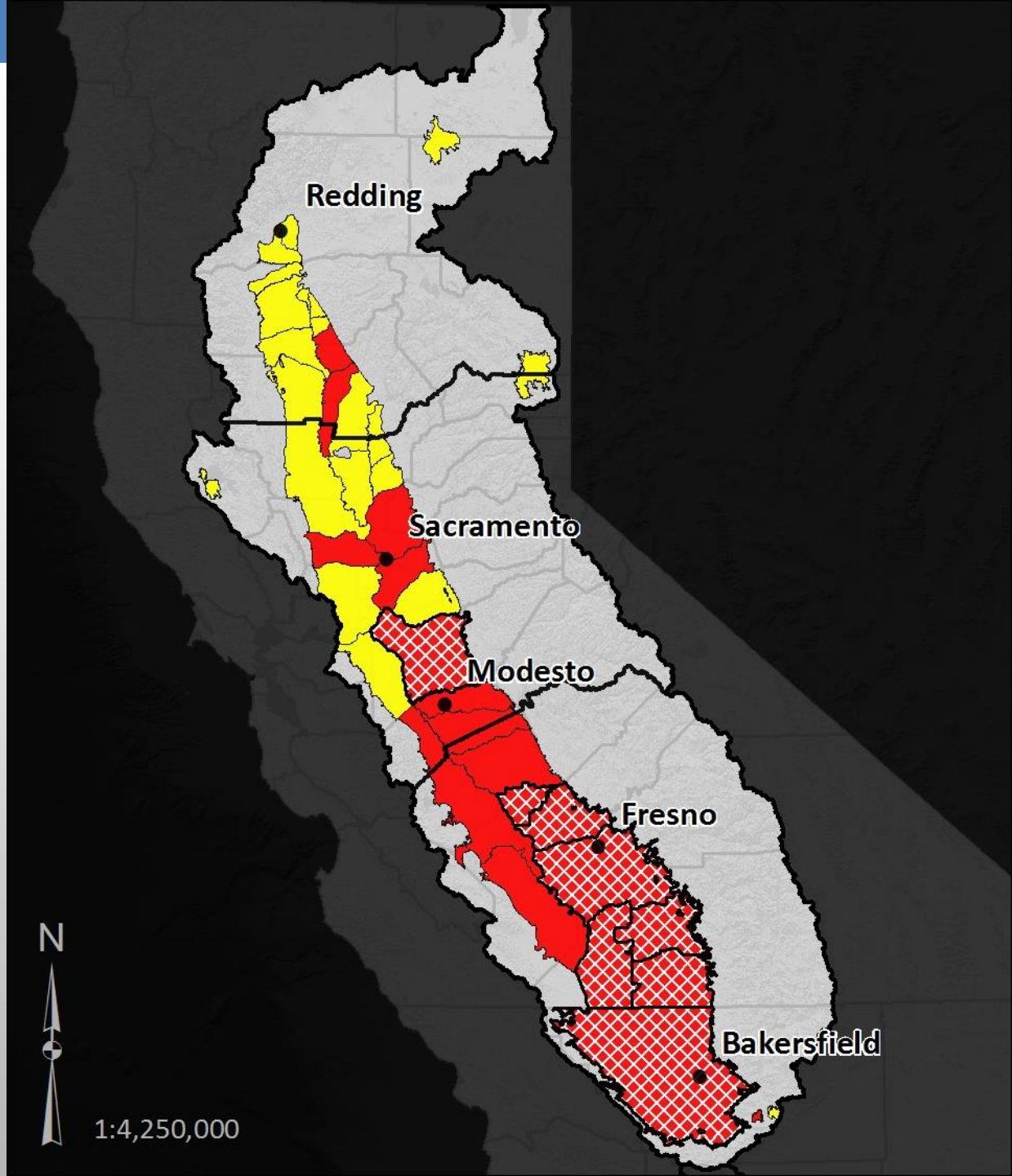
Trend toward higher average basin priority to the south of the Central Valley



Region 5

High and Medium Priority Basins, Including Basins in critical overdraft

The prioritization supports prior critical overdraft delineations by DWR



Tulare Lake Basin

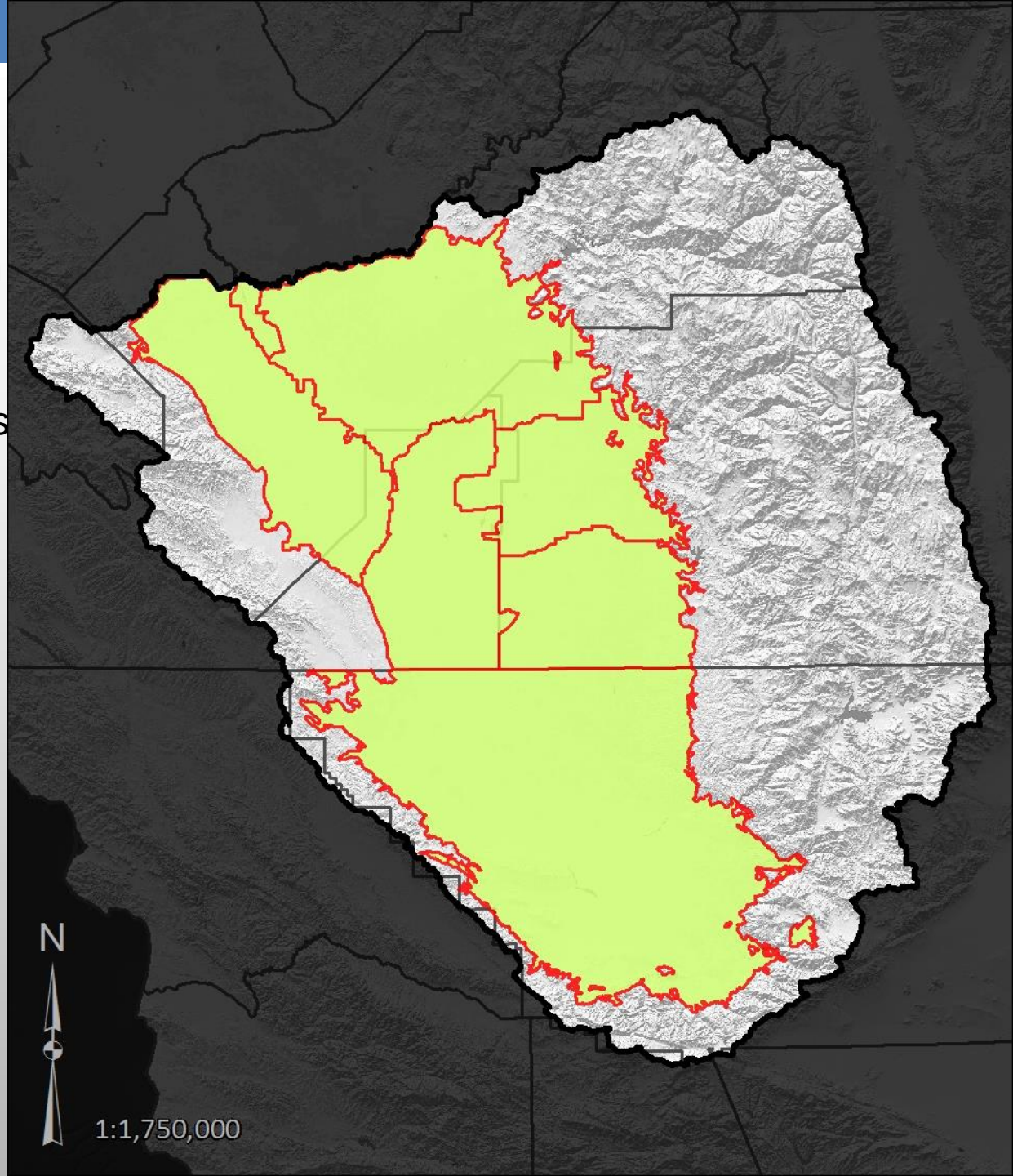
High Priority Basins

Only high priority basins shown on this map

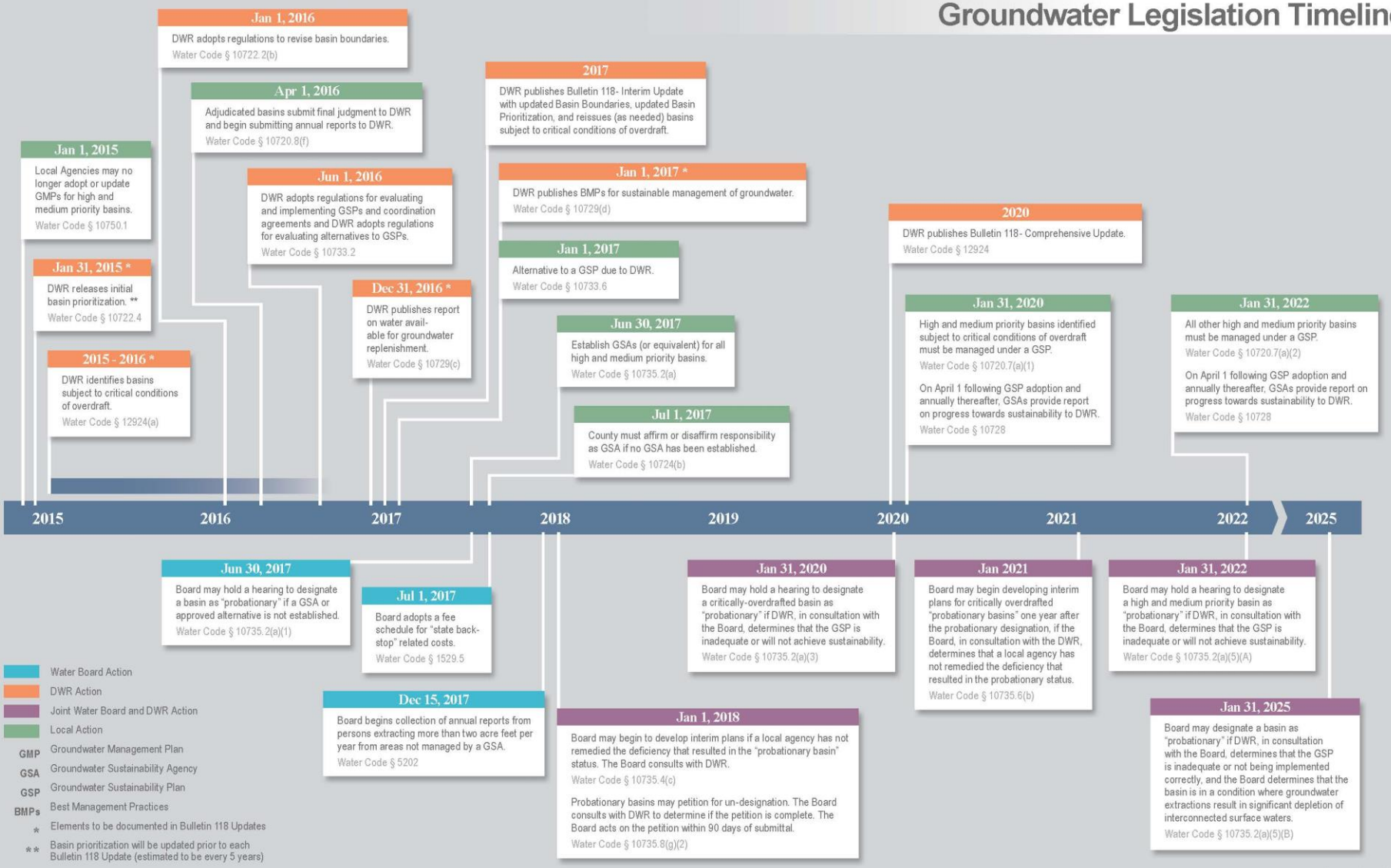
Most of the groundwater basins in the Tulare Lake Basin area are high priority

Kaweah Basin is ranked 3rd highest priority of 127 high and medium priority basins

What will SGMA mean for the Region? What activities are next?



Groundwater Legislation Timeline



Available at: www.groundwater.ca.gov

State Water Board Roles

- The State Backstop
  - Data Manager
  - Basin Manager

- Coordinate with DWR for communication, outreach, regulation development, and implementation of the backstop

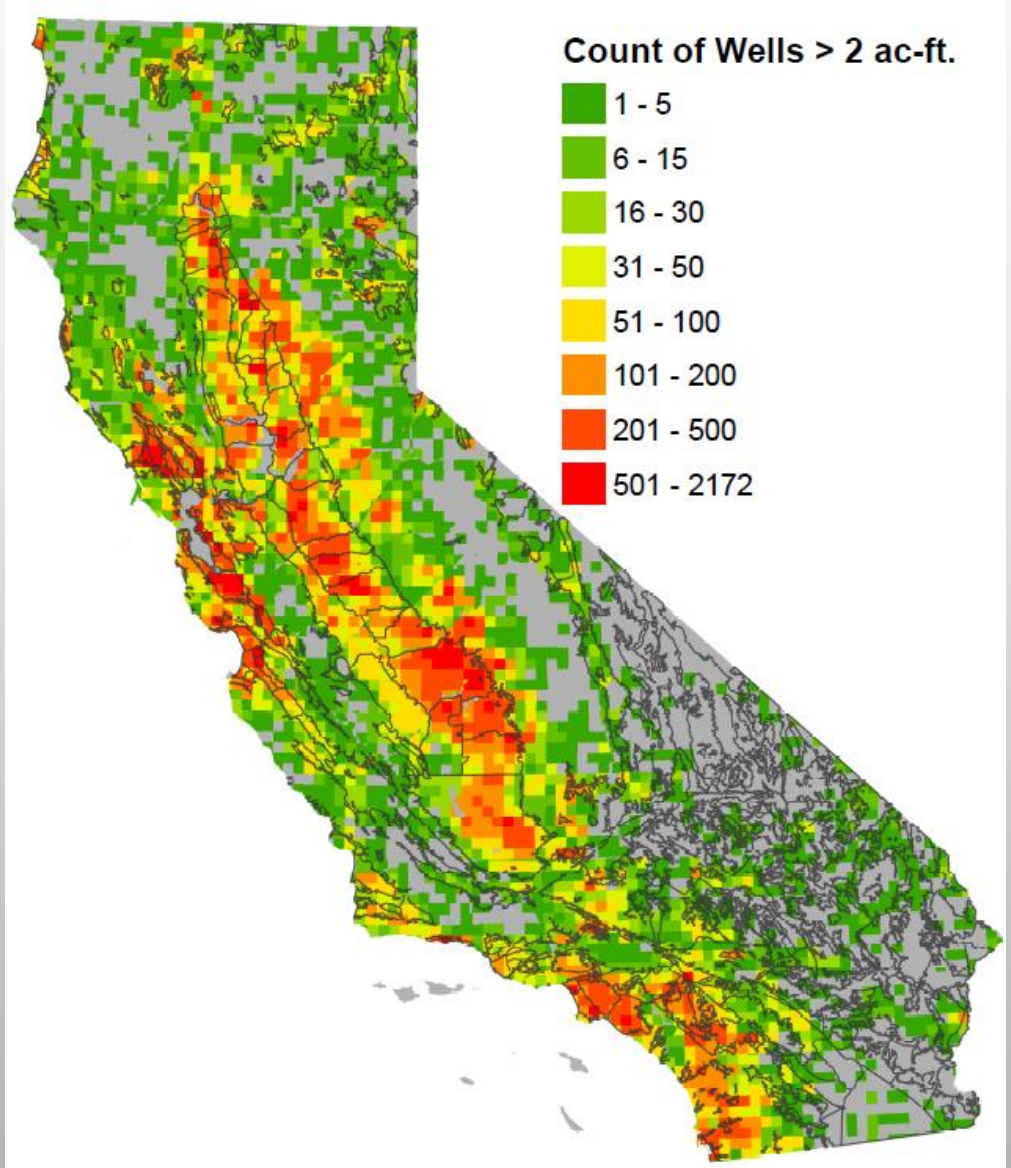
Role as Data Manager: Potentially Un-Managed Areas (PUMAs)

- First backstop role for Board is data collection (July 1, 2017)

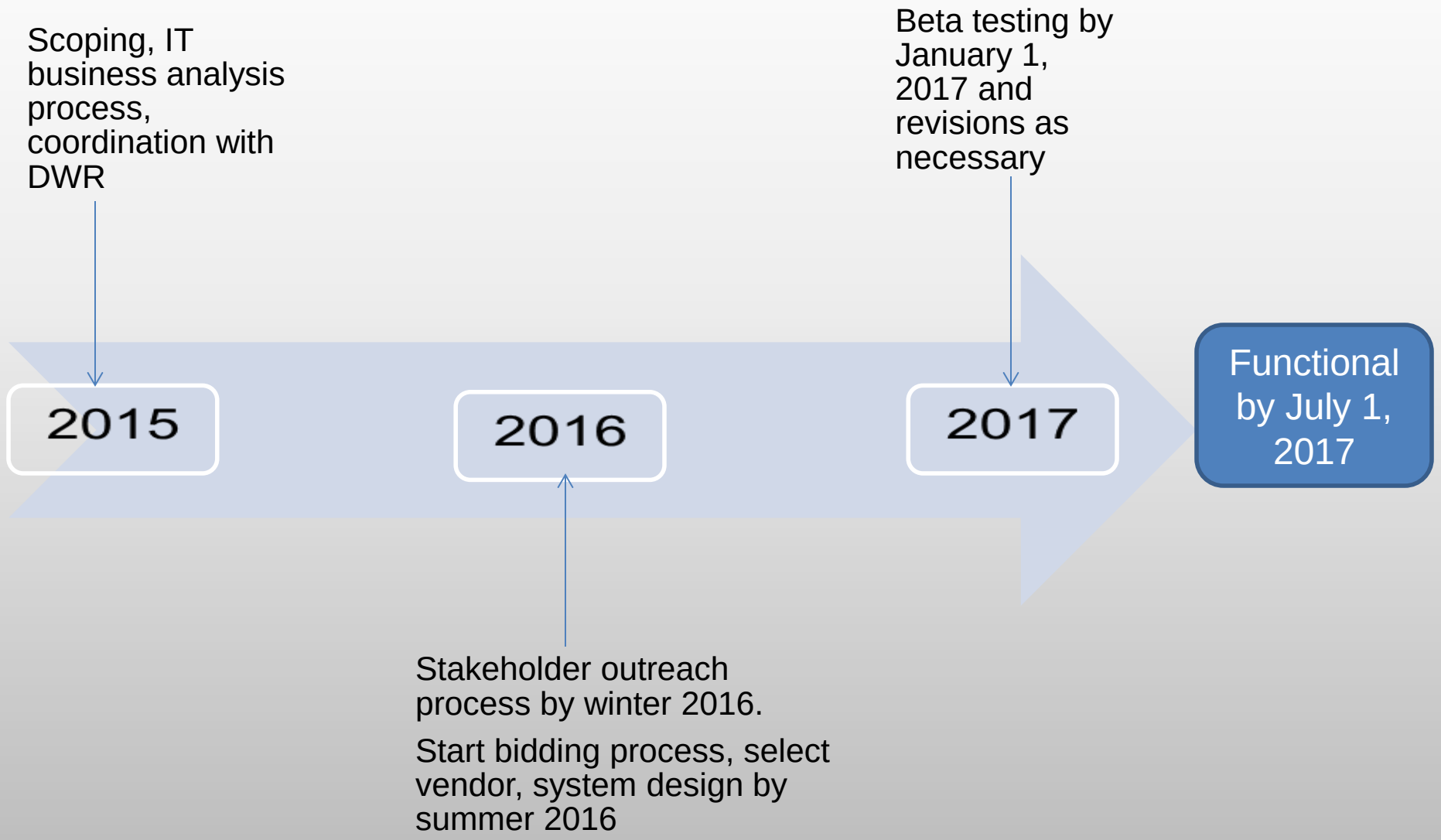
- Groundwater users in PUMAs report to State Board (Water Code §5203)
  - Place of extraction
  - Monthly records of volume of extractions
  - Purpose of use
  - *Any other info required to designate a basin as probationary and write interim plans*

Reporting System Needs

- Electronic reporting system to collect PUMA data
- Data need for interim plans
- Track fees
- Public interface



Data System Development



Role as Basin Manager (State Backstop)

- Develop fees
- Designate probationary basins
- Probationary basins lead to interim sustainability plans
- Interim plans manage basin until local efforts come up to speed

The “Backstop” State Board Intervention

After	Intervention Trigger
June 30, 2017	Areas without a GSA begin reporting well locations and extraction data to SWRCB; can begin probationary basin designation 180 days later.
Jan. 31, 2020	Can begin probationary basin designation in critically overdrafted basins with no GSP or where GSP is inadequate
Jan. 31, 2022	Can begin probationary basin designation in other high/medium priority basins without a GSP or inadequate GSP and basin is in long-term overdraft
Jan. 31, 2025	Probationary basin designations where GSP is inadequate and significant depletions of interconnected surface waters

In all triggering events, intervention is the result of failure by locals to create a GSA or adopt and implement a GSP

Fees

- Cover all costs related to backstop
  - Facilitation, investigation, monitoring, hearings, enforcement, administration
  - PUMA reporting and participation in Board hearings
- Fees need to be in place with data reporting system

Fee Schedule Development Timeline

DWR Key Activities

- Basin Boundary Revision Regulations
- Identification of Basins in Critical Overdraft
- Update Basin Priorities
- **Regulations for Sustainability Plans and how those plans will be reviewed**
- Communication and Outreach
- Proposition 1 Grant Guidelines and Funding Criteria

SWRCB & DWR Coordination

- Coordination Teams
- DWR responsible for evaluating and accepting GSPs; Board is responsible for implementing backstop, identifying probationary basins, writing interim basin management plans
- Board can request that DWR conduct investigations and provide technical assistance
- In some cases, the Board cannot designate probationary basins without first “consulting with DWR”

Other Focus Areas

- Cleanup legislation
  - One bill at present (SB 13, Pavley); so far includes only minor edits; at least 10 other bills pending
- Groundwater recharge as a beneficial use
- Adjudication reform
  - Two bills presently, could be more

Summary: State Board Approach

- Focus on existing authorities
- Support DWR in early years
- Support areas that want the help in early years
- Know the field, be prepared to step in strategically
- Develop ability to use tools sparingly
- Be judicious, strategic, and effective when acting
- Lightest touch possible, with goal of local success

Summary

- Many challenges to SGMA implementation
- Ready to assist DWR or local agencies through early stages
- Designing our record-keeping and assessment systems
- Following progress so as to be ready and helpful

Thank You!

Erik Ekdahl
Groundwater Mgmt. Program Manager
Erik.Ekdahl@waterboards.ca.gov
916-341-5316

Brent Vanderburgh, R5F, RFS Liaison
Brent.Vanderburgh@waterboards.ca.gov
916-341-5377

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Additional Information:
www.groundwater.ca.gov
DWR – www.water.ca.gov/groundwater
State Board – http://www.waterboards.ca.gov/water_issues/programs/gmp/index.shtml

Lyris email alert list:
http://www.swrcb.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml